

### Remarks/Arguments

In the first Office Action herein dated February 14, 2005, the Examiner rejected the single claim in this application under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,003,983 to Dingwall *et al.* After making certain specific statements about the alleged teaching content of the Dingwall *et al.* reference, the Examiner concludes in his rejection language that it is inherent that the system and method taught by Dingwall *et al.* is capable of detecting myocardial infarction.

The Examiner is categorically incorrect in this conclusion, and applicants, in this responsive Amendment, point out why this is the case in the context of presenting a currently amended claim 1, which now includes language that more specifically points out why the Examiner's conclusion is incorrect, and why applicants' claimed invention, as now set forth, is clearly distinguishable over the teachings of the Dingwall *et al.* reference.

As is made abundantly clear in applicants' specification, as well as in applicants' single claim in this case, the present invention is focused upon detecting myocardial infarction. It is important for the Examiner to understand that myocardial infarction is just one condition, among others, which is consistent with the condition known as myocardial ischemia, the broader level, subject-matter determination which is made by the Dingwall *et al.* reference. Put another way, myocardial infarction is not *per se* indicated by the detection of myocardial ischemia. Rather, myocardial infarction is a special case of myocardial ischemia. In other words, the detection of myocardial ischemia (the Dingwall *et al.* subject matter), without more, does not *per se* give an indication of myocardial infarction.

To detect myocardial infarction, and in accordance with practice of the present invention, applicants teach and claim essentially a twin-thresholding procedure, in which (a) a first thresholding step is performed to detect an ECG-wave ST deviation which is a broad level indicator of a myocardial ischemia condition, followed by (b) a second thresholding step which effectively asks the question whether an indication produced by the first step of an ST deviation which is indicative of a myocardial ischemia condition, namely, a non-benign ST deviation, effectively contains *further* information which indicates the special-case presence of myocardial infarction.

Nothing like this takes place in the Dingwall *et al.* reference which applies simply a single thresholding step to detect an ST deviation which is treated correctly as an indicator generally of the presence of a myocardial ischemia condition. Dingwall *et al.* applies no other test, and indeed does not need to apply any other test, in order to confirm the presence of a myocardial ischemia condition. More specifically, Dingwall *et al.* does not apply anything like applicants' pathologic thresholding step (the second thresholding step) which is necessary in a second stage of thresholding in order to determine whether a non-benign ST deviation can be determined also to be an indicator of a condition of myocardial infarction.

Applicants' single claim in this case, even before the changes made in the current amendment to the language in that claim, clearly points out applicants' two-step thresholding approach for detecting myocardial infarction. The first step involves analyzing ECG data for benign ST data based upon looking for a condition of ST deviation which is a pointer toward benignity or non-benignity, *followed by a second thresholding step* which involves establishing,

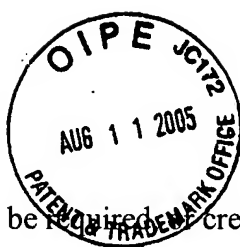
among other things, a pathological threshold beyond which it is possible, through certain additional steps which are set forth in claim 1, to provide an indication of the presence of myocardial infarction. The changes proposed in presently amended claim 1 only introduce into this claims language which will aid the reader more clearly in understanding that what is called for there is the above-described twin-thresholding procedure which lies as a key practice in accordance with applicants' invention.

For these reasons, applicants respectfully urge that the Dingwall *et al.* reference cannot be construed to be an anticipation of applicants' claim. That reference has nothing to with detecting myocardial infarction, and indeed, stops considerably short of detecting anything but the mentioned broader-level condition of myocardial ischemia.

Accordingly, favorable reconsideration of this application, and allowance of the single claim herein, are respectfully solicited. If the Examiner has any questions regarding the amendment or remarks, the Examiner is invited to contact Attorney-of-Record Jon M. Dickinson, Esq., at 503-504-2271.

**Request for Extension of time in Which to Respond**

Applicants hereby request an extension of time under 37 C.F.R. § 1.136. A PTOForm 2038 Credit Card authorization in the amount of \$510.00 is enclosed to pay the requisite extension fee. The Commissioner is hereby authorized to charge any additional fees



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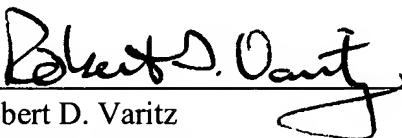
Respectfully Submitted,

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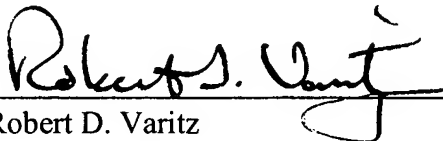
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Robert D. Varitz